

Turtles in the Gulf of Mexico

Five of the world's seven sea turtle species are found in the Gulf of Mexico: green, loggerhead, hawksbill, leatherback, and Kemp's ridley. All five species have been documented nesting on Padre Island National Seashore either historically or recently, but the majority of the nesting records are of the Kemp's ridley. These magnificent marine animals, once abundant in the oceans, have declined during the last century.



Kemp's ridley sea turtle

Sea Turtle Threats

Each of the five sea turtle species found in the Gulf Of Mexico is now classified as threatened or endangered and could become extinct unless steps are taken to protect and enhance their populations. Harvesting of the eggs, slaughtering for food and consumer products, incidental capturing by the fishing industry, and other factors are to blame for the dwindling sea turtle populations.

Kemp's ridley

The Kemp's ridley, *Lepidochelys kempii*, is the smallest of the five sea turtles found in the Gulf of Mexico. It is the most endangered sea turtle worldwide. The average length of a Kemp's ridley is 23 to 27 in. (58.5 to 70 cm) and an average weight of 100 lbs. (45 kg). This is the only species of sea turtle with an almost circular upper shell. Adults are olive green in color above and pale yellow below. Their diet consists primarily of crabs, but they will also eat shrimp, clams, and sea urchins. The Kemp's ridley's range is chiefly in the Gulf of Mexico, but they can be found

along the Atlantic coast as far north as New England and Nova Scotia. The primary nesting ground is a 16-mile stretch of beach at Playa de Rancho Nuevo, Tamaulipas, Mexico. The decline of the Kemp's ridley population is due to many factors, including, neartotal exploitation of eggs, harvesting of adults for meat, and incidental by-catch by the shrimping and fishing industries. Biologists at Padre Island National Seashore are attempting to re-establish a second nesting beach through a special program in which nests are located and eggs are collected.

Green

The green sea turtle, *Chelonia mydas*, is not actually green in color, but mottled brown. The name is derived from the greenish color of the fat in the body. The green turtle is considered large in size with an average length of 36 to 48 inches (90 to 120 cm). The record was set at 60 3/8 inches (153 cm). Its weight ranges from 250 to 450 lbs. (113 to 204 kg) with a record of more than 650 lbs. (295 kg). The green turtle feeds on sea grass and algae. The main reason for the decline of the green turtle was its culinary appeal. Recipes for green turtle were popular in the past and

overseas. Today, Texas waters, particularly south Texas inshore waters, provide very important habitat for green sea turtles. Most green turtles in Texas waters are juveniles and their numbers are increasing. The major nesting areas for green turtles in the Atlantic are Florida, Mexico, Surinam, Guyana, French Guyana, Costa Rica, the Leeward Islands, and Ascension Island in the mid-Atlantic. Padre Island National Seashore is the only location on the Texas coast where green turtle nesting has been documented. One to five green sea turtle nests are confirmed on Texas beaches each year.

Loggerhead

The loggerhead sea turtle, *Caretta caretta*, is a medium to large turtle. Adults are reddish-brown in color and are generally 31 to 45 inches (79 to 159 kg) in length with the record set at over 48 inches (over 122 cm). Loggerheads weigh 170 to 350 lbs. (77 to 159 kg) with a record of over 500 lbs. (over 227 kg). Its powerful jaws allow the turtle to crush heavy-shelled clams, crustaceans, and encrusting animals. The flesh of the loggerhead is not esteemed for eating as with other sea turtles. However, gathering loggerhead

eggs for use in packeries was once a major threat to the species. The major factors leading to their decline have been loss of eggs to human predators and mortality due to fishing operations. Loggerheads nest in such diverse places such as Brazil, Japan, South Africa, and Australia. Loggerheads nest in the United States from Texas to as far north as Virginia. Ninety percent of all U.S. nesting is estimated to occur in Florida. Since 1999, up to approximately six loggerhead nests have been found on Texas beaches each year.

Hawksbill

The hawksbill, *Eretmochelys imbricata*, is one of the smaller sea turtles of the Gulf of Mexico weighing only 95 to 165 lbs. (43 to 75 kg) as an adult and usually reaching a carapace (upper shell) length of 30 to 40 inches. Hawksbills have a hawk-like beak, from which their name originates. Hawksbills are found worldwide in tropical and subtropical seas. Hawksbills are usually brown in color and are famous for their beautiful, ornate shells. Their shells are used to make jewelry, combs, and eyeglass frames. The killing of

these turtles for their shells is the main reason for their decline. Hawksbills feed primarily on sponges and their flesh is poisonous in some regions. Hawksbills nest throughout the Gulf of Mexico and Caribbean. Only one hawksbill nest has been documented in Texas, at Padre Island National Seashore in 1998. Post-hatchling and juvenile hawksbills occur in Texas waters and each year several are found stranded on Texas beaches entangled in rope and mesh bags.

Leatherback

The leatherback, *Dermochelys coriacea*, is the largest species of sea turtle and the largest reptile in the world. An adult leatherback can reach up to 2000 lbs. (907 kg) and nine feet (275 cm) in length. They are black in color with pinkish white mottled areas on their shells. The shell of the leatherback is not a hard bony shell, like that of other sea turtles, instead it is made of leathery, oil-saturated connective tissue loosely overlaying on interlocking dermal bones. The shell has seven longitudinal ridges and it tapers to a point. Leatherbacks eat sea jellies and other soft-bodied organisms. In one day, a leatherback can eat its weight

in jellies. Leatherbacks have a special adaptation that allows them to change their body temperature and dive into deeper, colder water than other sea turtles. This species is the most migratory and widespread of all the sea turtles and can be found nesting in the tropical beaches of the Atlantic, Pacific, and Indian Oceans. Leatherbacks have not been recorded nesting at Padre Island National Seashore since the 1930's. The main threats to these animals are long term harvest of eggs and adults, and incidental capture by the fishing industry.

How can you help?

Be observant, if you see any tracks or live or dead turtles on the beach, *immediately* contact a park ranger or call a park sea turtle biologist at (361) 949-8173 ext. 226. However, do not detain nesting turtles or force any turtles into the water. Taking or having in your possession any or part of these threatened or endangered turtles is a felony, with fines ranging up to \$20,000. If you find a nesting female, do not approach her until she has begun laying eggs or is covering her nest. If possible, photograph or videotape her. Examine her top shell for a living tag (small plugs of

their lighter bottom shell implanted into their darker upper shell) and note the location. Look at her front flippers to find a metal tag and record the number, but do not remove the tag. Place a distinguishable marking in the sand about one foot to the side of the nest. Also protect any sea turtle tracks you find. Place a noticeable object next to tracks and note their exact location. Be sure to notice how far the tracks extend up the beach. Any information reported to park rangers will help to save these docile creatures. Thank you for your cooperation.





Green sea turtle

Loggerhead sea turtle